

Form PTO 1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
32120-CON1

SERIAL NO.
10/014,310

APPLICANT
Ritesh P. Shah, et al.

FILING DATE
December 11, 2001

GROUP
1733

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
llg	AA 6,113,761	09/00	Kardokus et al.			
llg	AB 6,139,701	10/00	Pavate et al.			
llg	AC 3,497,402	2/97	Douglas			
llg	AD 2001/0023726A	09/01	Koenigsmann et al.			
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FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No
AM 19362089543		Japan				
AN						
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llg	AR	R.Z. Valiev et al., "Bulk Nanostructured materials from severe plastic deformation", Progress in Materials Science, Vol. 45, 2000, pp. 103-189.
llg	AS	S. Ferrasse et al., "ECAE Targets with Sub-Micron Grain Structures Improve Sputtering Performance and Cost-of-Ownership", Semiconductor Manufacturing, Vol. 4, Issue 10, October 2003, pp. 76-92.
llg	AT	Yoshinori Iwahashi et al., "Microstructural Characteristics of Ultrafine-Grained Aluminum Produced Using Equal-Channel Angular Pressing", Metallurgical and Materials Transactions, Vol. 29A, pp. 2245-2252, September 1998.

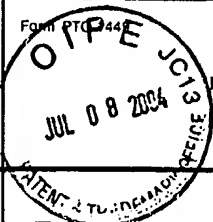



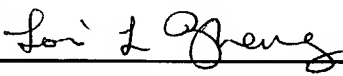
EXAMINER *Shi L Zheng*

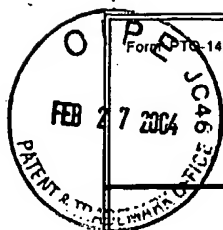
DATE CONSIDERED 10/4/04

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Form PTO-149		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 32120-CON1		SERIAL NO. 10/014,310	
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Ritesh P. Shah, et al.			
				FILING DATE December 11, 2001		GROUP 1753	
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
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		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
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mf	AR		M. Furukawa et al., "Microhardness Measurements and the Hall-Petch Relationship in an Al-Mg Alloy with Submicrometer Grain Size", Acta Mater. Vol. 44, No. 11, pp. 4619-4629, 1996.				
ly	AS		Segal et al., "Plastic Working of Metals by Simple Shear", Russian Metall. Vol. 1, pp. 99-105, 1991.				
ly	AT		Ruslan Z. Valiev et al., "SPD-Processed Ultra-Fine Grained Ti Materials for Medical Applications", Advanced Materials & Processes, December 2003, pp. 33-34.				
EXAMINER <i>Sei P. Sheng</i>				DATE CONSIDERED 10/4/04			
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Form PTO-1290		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 32120-CON1		SERIAL NO. 10/014,310	
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Ritesh P. Shah, et al.			
				FILING DATE December 11, 2001		GROUP 1753	
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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA						
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		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	AM	JP 362080541		Japan			
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
lfy	AR		F. J. Humphreys et al., "Developing stable fine-grain microstructures by large strain deformation", Phil. Trans. R. Soc. Lond. A, June 15, 1999, Vol. 357 #1756, pp. 1663-1681.				
lfy	AS		S. Ferrasse et al., "Texture evolution during equal channel angular extrusion Part I. Effect of route, number of passes and initial texture", Materials Science and Engineering, Vol. 388, March 15, 2004, pp. 28-40.				
lfy	AT		V.M. Segal, "Equal channel angular extrusion: from macromechanics to structure formation", Materials Science & Engineering A271, November 1, 1999, pp. 322-333.				
EXAMINER		DATE CONSIDERED					
Louis L. Zheng		12/4/04					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PT 44 		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 32120-CON1		SERIAL NO. 10/014,310	
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Ritesh P. Shah, et al.			
FILING DATE December 11, 2001				GROUP I753			
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*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
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					Yes	No	
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	AR	R.Z. Valiev et al., "Plastic deformation of alloys with submicron-grained structure". Materials Science and Engineering, A137 (1991) pp. 35-40.					
	AS	AMS Specialty Handbook*, <u>Aluminum and Aluminum Alloys</u> , ASM International*, 1993, pp 290-292.					
	AT	Metals Handbook 8 th Edition, Vol. 1, <u>Properties and Selection of Metals</u> , American Society for Metals, 1961, pp. 15 and 18.					
EXAMINER 			DATE CONSIDERED 10/4/04				
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>dy</i>	AA	3,268,328	08/1996	Toirti, Jr.			
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FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
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<i>dy</i>	AR		Clark et al, "Influence of Initial Ingot Breakdown on the Microstructural and Textural Development of High Purity Tantalum", Metallurgical transactions, vol. 22A, pp. 2959-2968, December 1991.				
<i>dy</i>	AS		Kock et al, Tantalum-Processing, Properties and Applications, JOM vol. 41., No. 10, October 1989, pp. 33-39.				
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EXAMINER				DATE CONSIDERED			
<i>Li & Gung</i>				10/4/04			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO-1450

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

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APPLICANT
Ritesh P. Shah, et al.

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PATENT & TRADEMARK OFFICE

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)

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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
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							Yes	No
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lls	AN	EP 0902102 A1	08/1998	EPO				
lls	AO	EP 0281141 B2	03/1988	EPO				
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lls	AR	"Nickel, Cobalt and Their Alloys", pub. By ASM International, December 2000, pages 76, 230-234.
lls	AS	S. Sawada, "On Advanced Sputtering Targets of Refractory Metals and Their Silicides for VLSI-Applications", 12 th International Plansee Seminar, 1989, Top 5: Ultrapure Refractory Metals, pgs. 207, 216.
lls	AT	P. Ding et al, "Copper Barrier, Seed Layer, and Planarization Technologies", June 10-12, 1997 VMIC Conference 1997, ISMIC-107/97/0087(c), pgs. 87-92.

EXAMINER *San L. Zhang* DATE CONSIDERED *10/4/04*

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